Catalogue of American Amphibians and Reptiles.

HAYNES, DAVID. 1976. *Graptemys caglei*.

Graptemys caglei Haynes and McKown Cagle's map turtle

Graptemys caglei Haynes and McKown, 1974:143. Type-locality, "the Guadalupe River, 8 km NW Cuero, DeWitt Co., Texas." Holotype, Texas Natural History Collection (Univ. Texas) 36061, adult male, obtained by Ronald McKown, 29 June 1967 (examined by author).

• CONTENT. No subspecies are recognized.

• DEFINITION. This medium-sized map turtle exhibits sexual dimorphism. Adult males are 700–1100 mm in carapace length. The carapace is narrower anteriorly than posteriorly, serrate posteriorly, and has a middorsal keel with sharp vertebral spines. The only available adult female (see Fig.) is larger (1611 mm carapace length) than the males. The female has a more rounded shell and less prominent vertebral spines.

Carapace color is light green with cream circular lines on the pleurals and marginals and black or brown vertebral spines. The cream-colored plastron is heavily flecked by black, and black markings extend along the borders of each scute. The ground color of the head, neck, and limbs is black with several cream stripes. A postorbital line extends from below each orbit dorsally and posteriorly and meets the corresponding line from the opposite side of the head at a point in the midline posterior to the orbits.

Juveniles differ from adult males in an almost round shell, bolder plastron lines, and no plastron flecks.

• DIAGNOSIS. A species of *Graptemys* most closely resembling *G. versa*, but differing from it and others in having the following combination of characteristics: (1) ventral surface of jaw with a transverse cream-colored line, (2) dorsal head pattern with a light "V"-shaped mark, (3) plane of top of head toward snout horizontal in profile, snout somewhat pointed, (4) low vertebral spines, posterior midline of vertebrals brown or black, (5) carapace somewhat flattened and with central portions of scutes raised above their borders, (6) carapace predominately green, (7) black flecks on plastron of adult males, (8) supraoccipital spine short, expanded dorso-ventrally, and (9) adult females not developing wide heads or broadened alveolar surfaces.

• DESCRIPTIONS. The only descriptions of *G. caglei* are in Haynes and McKown (1974) and Conant (1975).

• ILLUSTRATIONS. The type description (Haynes and McKown, 1974) includes a black and white photograph of the dorsum of the holotype. Also included are black and white photographs of the dorsal, ventral, and lateral surfaces of adult male *G. caglei*, *G. kohni*, and *G. versa*; a lateral view of the skulls of adult females and a ventral view of juveniles of these three species; plus a photograph of the dorsal head pattern of four juvenile *G. caglei*. Conant (1975) contains a line drawing of chin markings. The female is illustrated for the first time here.

• DISTRIBUTION. This map turtle appears to be confined to the Guadalupe River system of south central Texas. Sight records only are available from the San Antonio River, which flows into the Guadalupe about 10 km above its mouth. This stream and the other

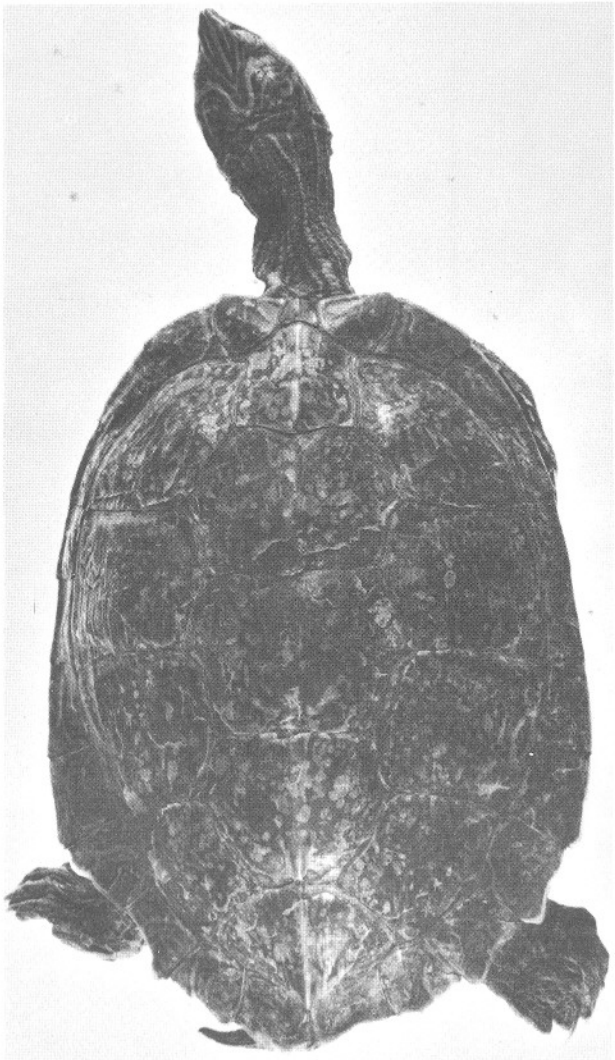
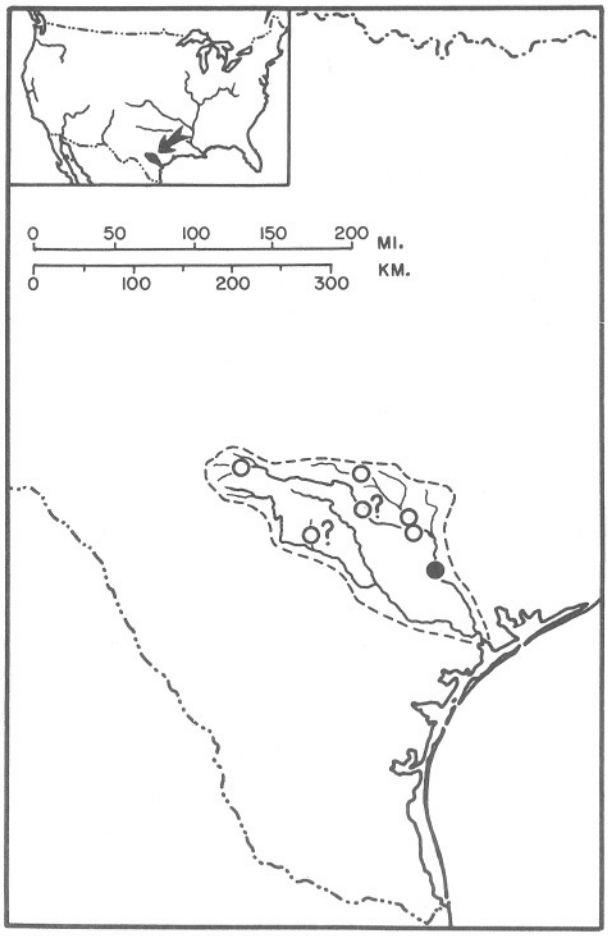


FIGURE. Dorsal view of adult female *G. caglei* (TNHC 41223) collected 12 km SW Hunt, Kerr County, Texas. Carapace length, 16.11 cm; plastron length, 14.55 cm; carapace width, 12.17 cm; plastron width, 9.37 cm; height, 6.84 cm; head width, 2.55 cm.



MAP. The solid circle marks the type-locality. Open circles indicate other localities. Question marks indicate sight records and lost specimens. The broken line borders the Guadalupe River system, the presumed range. This map defines the drainage pattern more accurately than Figure 1 in Haynes and McKown (1974:144).

major tributaries of the Guadalupe should be more closely examined for *Graptemys*.

• FOSSIL RECORD. None.

• PERTINENT LITERATURE. Haynes and McKown (1974) list stomach contents, dates of hatchling appearance, habitat, and evolutionary relationships of *G. caglei*. McKown (1972) examined the electrophoretic patterns of the plasma proteins and the karyotypes of all species of *Graptemys* and *Malaclemys* including *G. caglei* ($2n = 50$ in *caglei*). Conant (1975) provides identification characteristics.

• ETYMOLOGY. The species was named in memory of Fred R. Cagle, well-known herpetologist and administrator at Tulane University.

COMMENT

In skull osteology and head pattern, *G. caglei* seems to be intermediate between *G. versa* and *G. kohni*.

Practically nothing is known of the life history of this species.

LITERATURE CITED

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McKown, Ronald Ray. 1972. Phylogenetic relationships within the turtle genera *Graptemys* and *Malaclemys*. Ph.D. Dissertation. Univ. Texas at Austin. ii + 111 p.

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